


DUPLICATE

Dart Aerospace Ltd.

Date: Tuesday, 20/01/2009 9:00:36 AM
User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Job Number : 43663 Estimate Number : 13029 P.O. Number : This Issue : 20/01/2009 S.O. No. : Prsht Rev. : NC First Issue : 20/11/2008 Type : SMALL /MED FAB Previous Run : 42111 Written By :  Checked & Approved By : Comment : Est Rev:A New Issue 07-09-27 DD verified by: EC Est Rev:B ECN 1113P 08-01-22 DD Est Rev:C ecn1162 08-04-02 DD verified by: EC	Drawing Name : WELDMENT TOP PANEL Part Number : D36503 Drawing Number : D3650 REV.C Project Number : N/A Drawing Revision : C Material : Due Date : 20/12/2008 Qty: 4 Um: Each
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Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M304S26GA	304/316 0.018 SHEET
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Comment: Qty.: 1.2023 sf(s)/Unit Total : 4.8090 sf(s)
 304/316 SS sheet 26 ga (0.018" thick)
 Batch: 109398 IB 9-1-21

2.0	WATER JET	FLOW WATER JET
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Comment: FLOW WATER JET
 1-Cut as per Dwg D3650
 Dwg Rev: C
 Prog Rev: C

IB 9-1-21

4

2-Deburr if necessary IB 9-1-21

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

IB 9-1-21

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

S 09/01/21 (X4)

5.0	BRAKE NC	NC BRAKE
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Comment: NC BRAKE
 1-Form as per Dwg D3650 using DT9426
 2-bend as per dwg

SB 09/01/22 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 20/01/2009 9:00:36 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WELDMENT TOP PANEL

Job Number: 43663

Part Number: D36503

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

S 02/01/22 (x4)

7.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

8.0	D365011	Filler Plate
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

FILLER PLATE

batch 43820 ✓

Cpl 09.04.07

9.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: 1-trim to fit (D3650-11)

2-Weld assembly as per dwg D3650 QSI004

3-grind weld smooth if necessary

Cpl 09.04.07

(x4)

10.0	QC9	VISUAL WELDING INSPECTION
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Comment: VISUAL WELDING INSPECTION

D 09.04.07 (x4)

11.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

S 09/04/07 (x4)

12.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and stock

Location: 189

9/4/9

(40)

13.0	QC21	FINAL INSPECTION/W/O RELEASE
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Comment: FINAL INSPECTION/W/O RELEASE

09/04/13 (x4)

Job Completion



mf 09-04-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: W3603
Description: Center Panel		Part Number: D3650-3
Inspection Dwg: D3650	Rev: B	Page 1 of 1

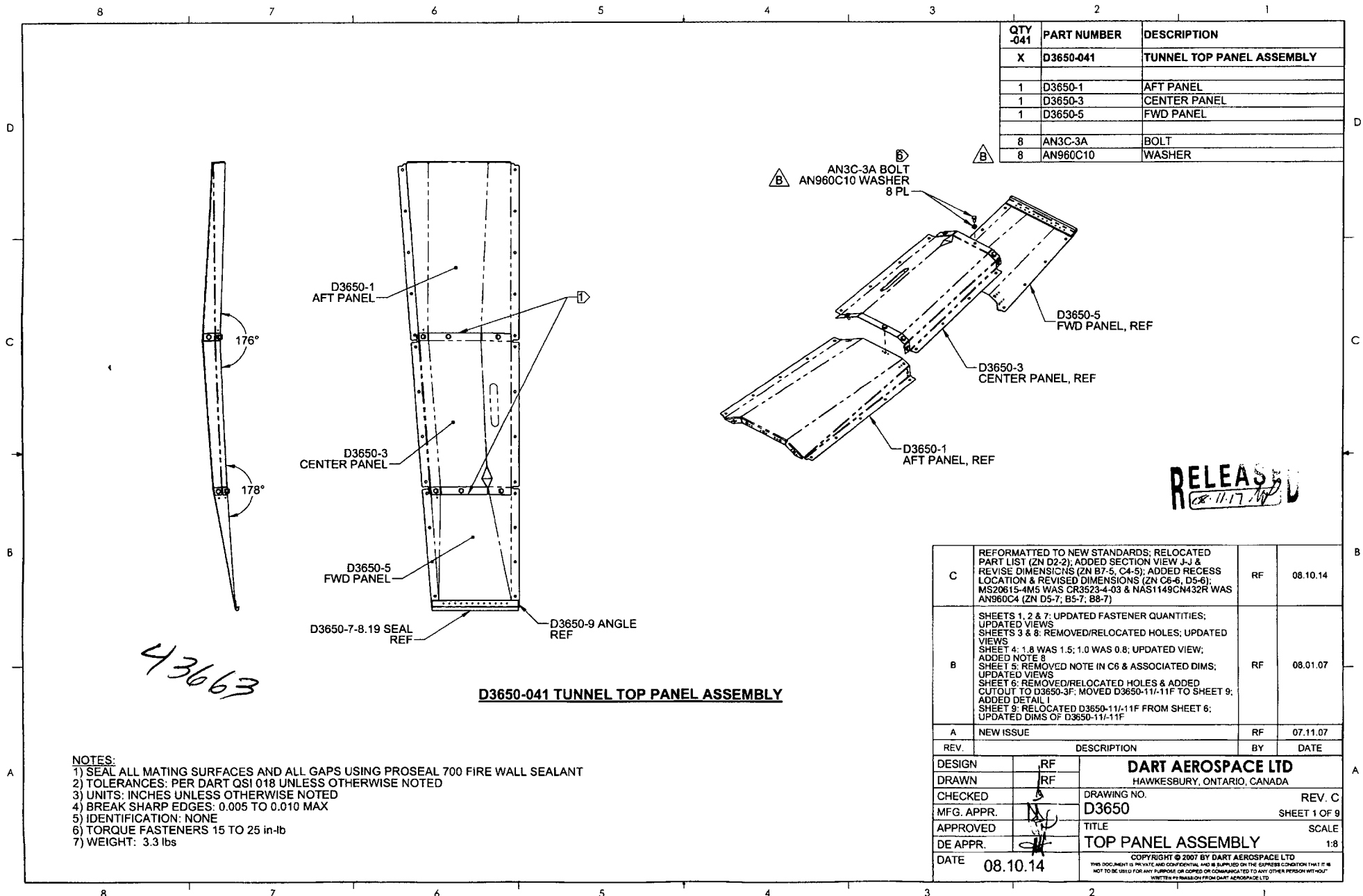
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.221	+0.005/-0.001	0.224	✓			
Ø0.213	+0.005/-0.001	0.217	✗			
0.40	+/-0.030	0.403	✗			
15.45	+/-0.030	15.45	✗			
10.49	+/-0.030	10.49	✗			
15.53	+/-0.030	15.53	✓			
11.99	+/-0.030	11.99	✓			
12.90	+/-0.030	12.90	✓			
4.300	+/-0.010	4.303	✓			
12.09	+/-0.030	12.09	✓			
13.06	+/-0.030	13.06	✗			
1.943	+/-0.010	1.948	✗			
5.884	+/-0.010	5.890	✓			
8.248	+/-0.010	8.251	✗			
9.196	+/-0.010	9.198	✗			
13.80	+/-0.030	13.80	✗			
2.28	+/-0.030	2.280	✓			
7.19	+/-0.030	7.190	✓			
9.55	+/-0.030	9.548	✗			
10.65	+/-0.030	10.65	✓			
3.35	+/-0.030	3.350	✗			

Measured by: RB	Audited by: S	Prototype Approval:	N/A
Date: 9-1-21	Date: 09/01/21	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.04.17	New Issue	KJ/DD	DS



QTY -041	PART NUMBER	DESCRIPTION
X	D3650-041	TUNNEL TOP PANEL ASSEMBLY
1	D3650-1	AFT PANEL
1	D3650-3	CENTER PANEL
1	D3650-5	FWD PANEL
8	AN3C-3A	BOLT
8	AN960C10	WASHER

D3650-041 TUNNEL TOP PANEL ASSEMBLY

- NOTES:
- 1) SEAL ALL MATING SURFACES AND ALL GAPS USING PROSEAL 700 FIRE WALL SEALANT
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE
 - 6) TORQUE FASTENERS 15 TO 25 in-lb
 - 7) WEIGHT: 3.3 lbs

C	REFORMATTED TO NEW STANDARDS; RELOCATED PART LIST (ZN D2-2); ADDED SECTION VIEW J-J & REVISE DIMENSIONS (ZN B7-5, C4-5); ADDED RECESS LOCATION & REVISED DIMENSIONS (ZN C6-6, D5-6); MS20615-4MS WAS CR3523-4-03 & NAS1149CN432R WAS AN960C4 (ZN D5-7; B5-7; B8-7)	RF	08.10.14
B	SHEETS 1, 2 & 7: UPDATED FASTENER QUANTITIES; UPDATED VIEWS SHEETS 3 & 8: REMOVED/RELOCATED HOLES; UPDATED VIEWS SHEET 4: 1.8 WAS 1.5; 1.0 WAS 0.8; UPDATED VIEW; ADDED NOTE 8 SHEET 5: REMOVED NOTE IN C6 & ASSOCIATED DIMS; UPDATED VIEWS SHEET 6: REMOVED/RELOCATED HOLES & ADDED CUTOUT TO D3650-3F; MOVED D3650-11/11F TO SHEET 9; ADDED DETAIL I SHEET 9: RELOCATED D3650-11/11F FROM SHEET 6; UPDATED DIMS OF D3650-11/11F	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 1 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	1:8
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8

7

6

5

4

3

2

1

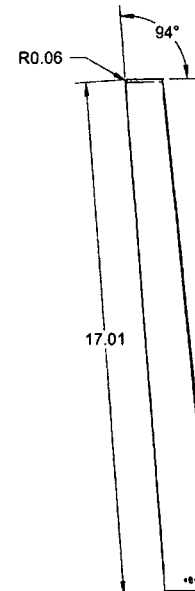
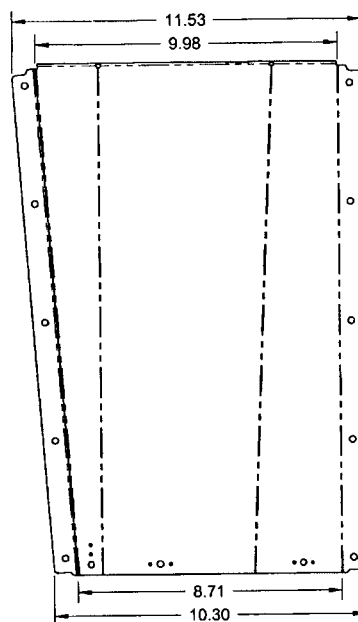
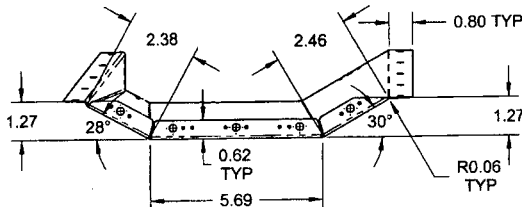
QTY -1	PART NUMBER	DESCRIPTION
X	D3650-1	AFT PANEL
1	D3650-1B	AFT PANEL BENT PART
18	MS20427M3-3	RIVET
6	MS21060-3K	NUTPLATE
3	MS21062-3K	NUT PLATE

MS21060-3K NUTPLATE
MS20427M3-3 RIVET, 2 PL
6 PL

D3650-1B
AFT PANEL BENT PART

MS21062-3K NUTPLATE
MS20427M3-3 RIVET, 2PL
3 PL

D3650-1 AFT PANEL



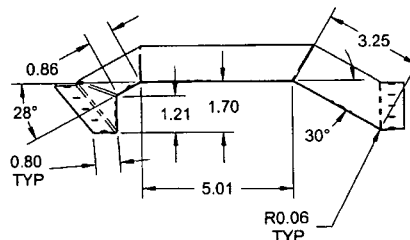
D3650-1B AFT PANEL BENT PART
(MAKE FROM D3650-1F FLAT PATTERN)

RELEASED

43663

NOTES:

- 1) FINISH: NONE
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) UNITS: INCHES UNLESS OTHERWISE NOTED
- 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 5) IDENTIFICATION: NONE
- 6) WEIGHT: 1.3 lbs



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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 2 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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7

6

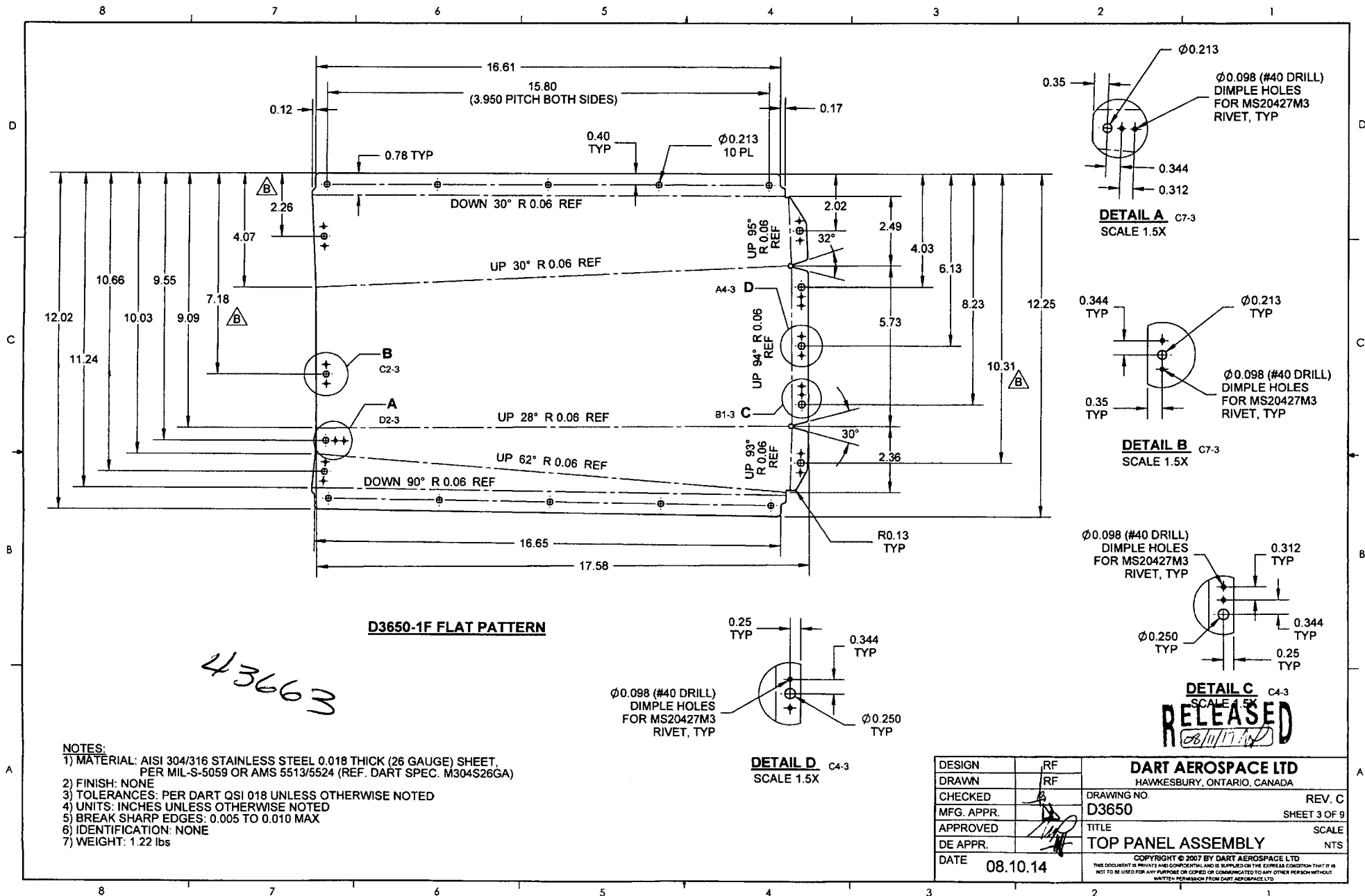
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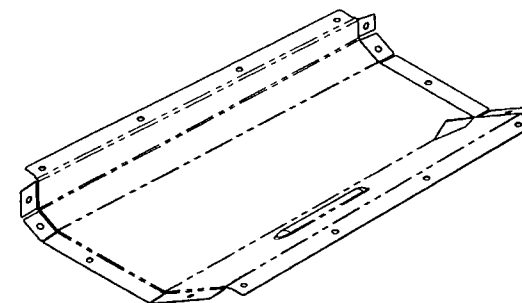
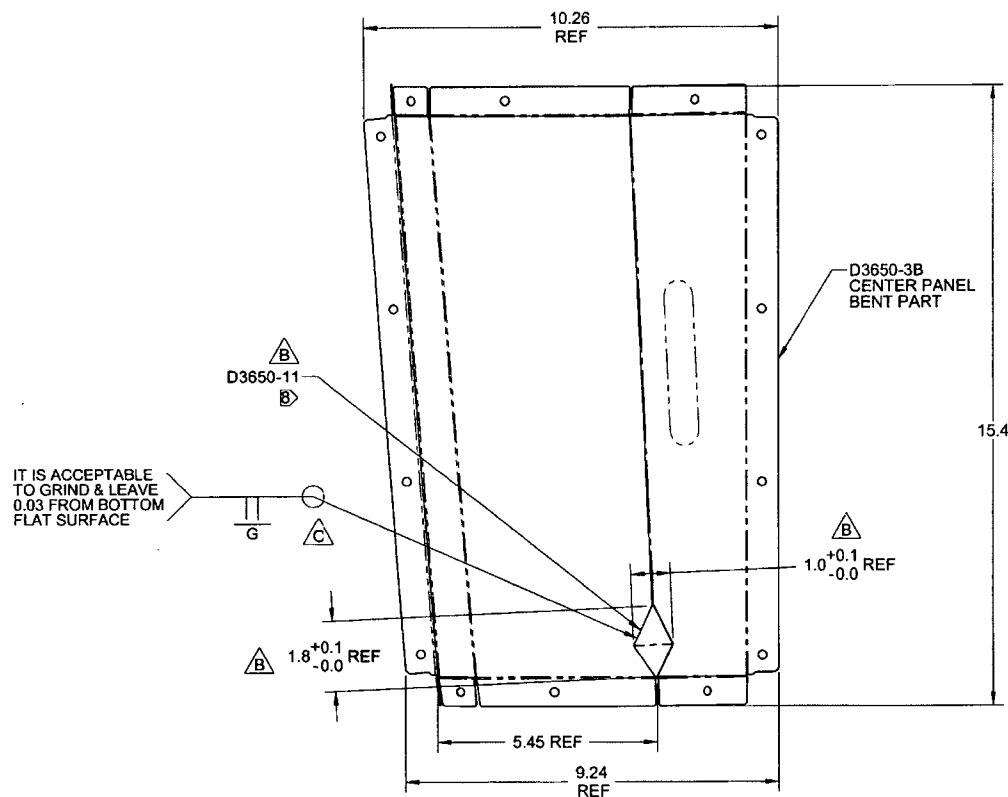
3

2

1



QTY	PART NUMBER	DESCRIPTION
-3		
X	D3650-3	CENTER PANEL
1	D3650-3B	CENTER PANEL BENT PART
1	D3650-11	FILLER PLATE



D3650-3 CENTER PANEL
(LOOKING FROM OUT SIDE SURFACE)

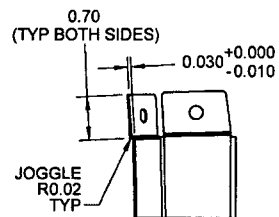
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08-11-17

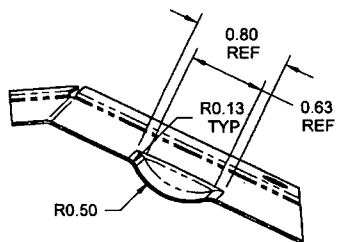
NOTES:

- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.0 lb
- 8) TRIM D3650-11 TO FIT AS REQUIRED

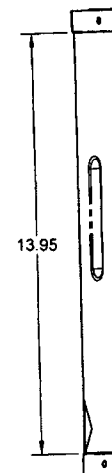
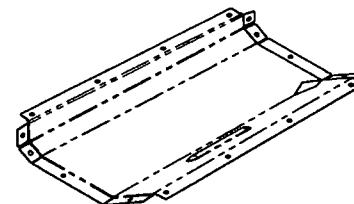
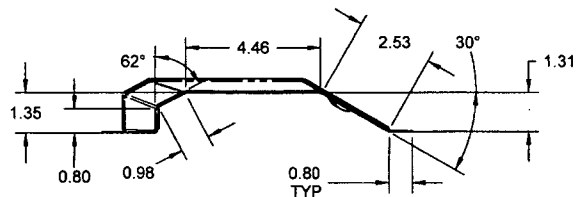
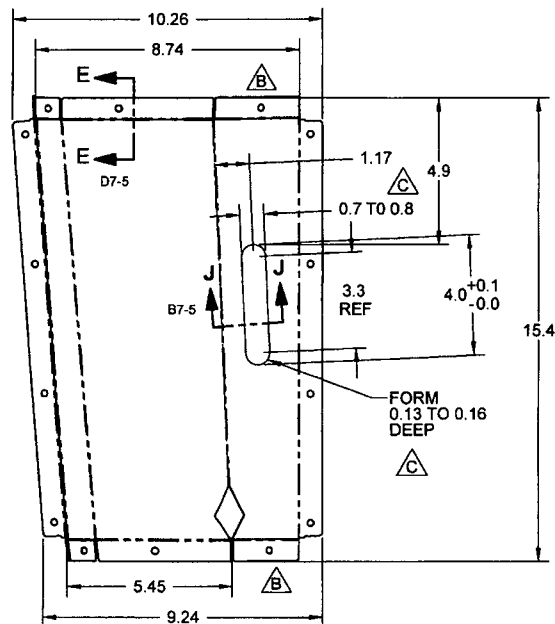
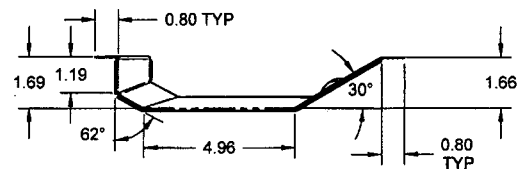
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DRAWN	RF		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 4 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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SECTION E-E D5-5
SCALE 2X



SECTION J-J C5-5
SCALE 3.5X






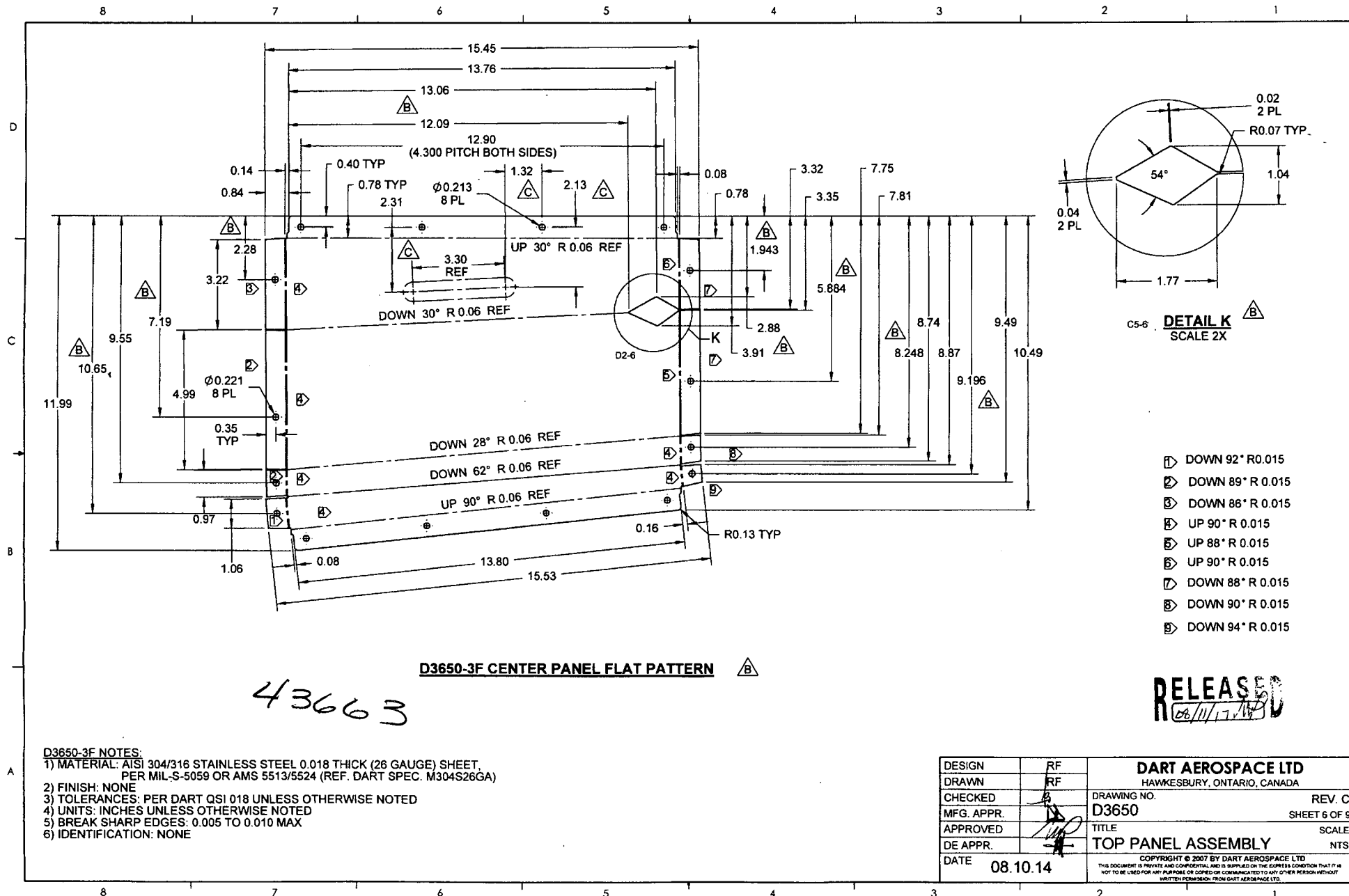
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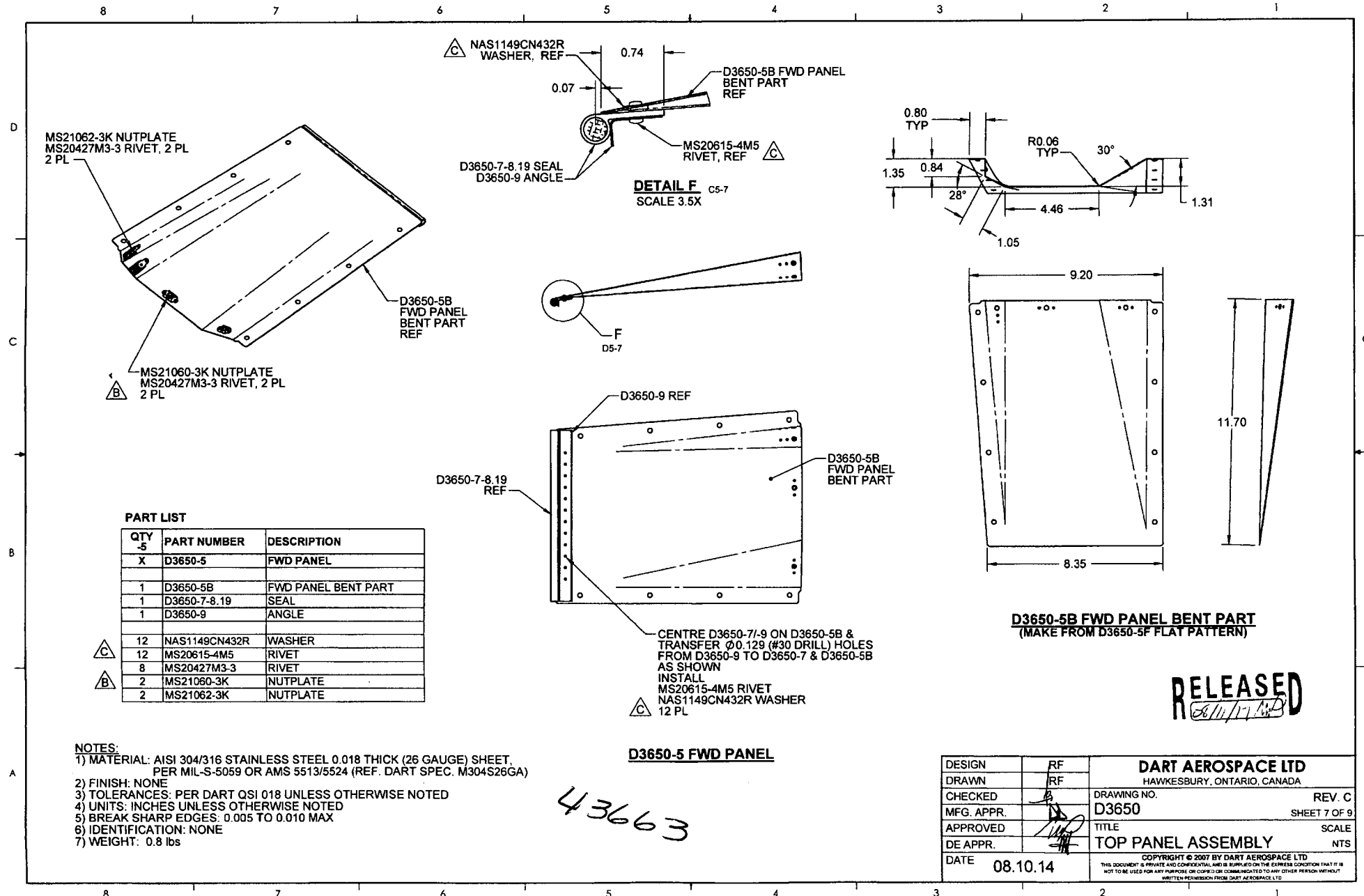
- NOTES:**
 1) FINISH: NONE
 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 5) IDENTIFICATION: NONE

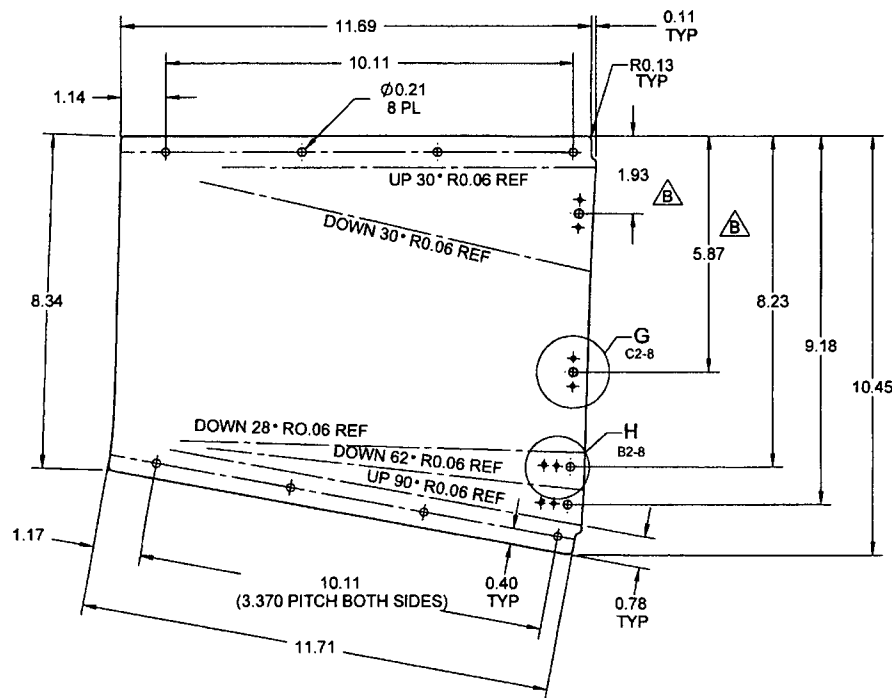
D3650-3B CENTER PANEL BENT PART
 (MAKE FROM D3650-3F FLAT PATTERN)

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 8/10/14

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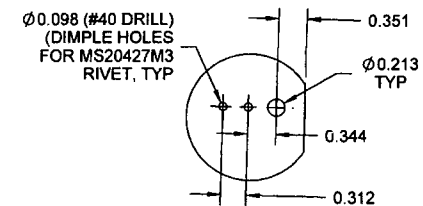
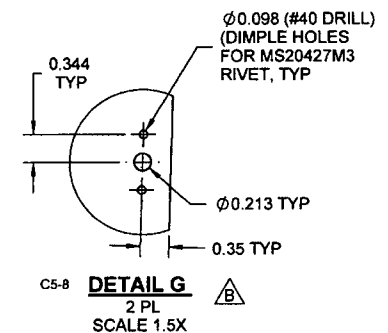
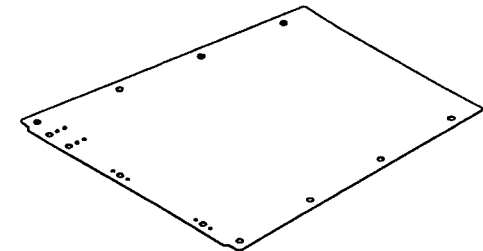


D3650-5F FLAT PATTERN




NOTES:

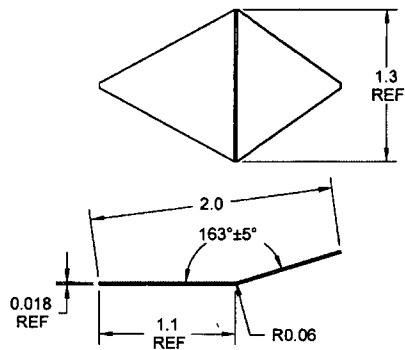
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.6 lb

43663

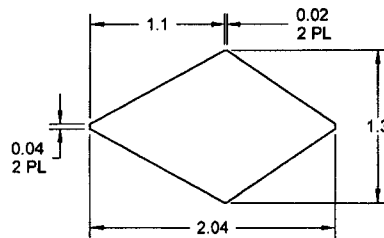


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04/11/17

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CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 8 OF 9
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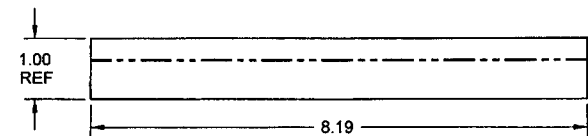
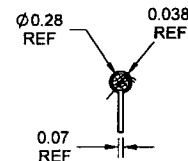
D3650-11 FILLER PLATE
(MAKE FROM D3650-11F FLAT PATTERN)



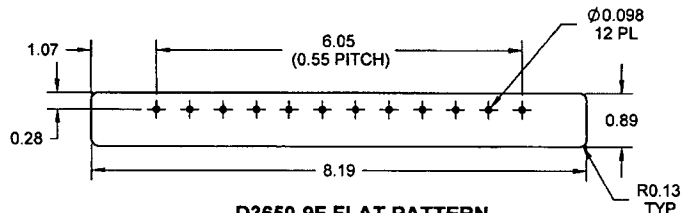
D3650-11F FLAT PATTERN



D3650-9 ANGLE
(MAKE FROM D3650-9F FLAT PATTERN)



D3650-7-8.19 SEAL



D3650-9F FLAT PATTERN





D3650-7-8.19 NOTES:

- 1) MATERIAL: P/N 8168-1 TADPOLE SEAL (REF. BELL P/N 120-104-1)
POSSIBLE SUPPLIER: EAGLE COPTERS OR BELL
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.05 lb
- 8) PART NUMBER: D3650-7-X.XX
WHERE X.XX = LENGTH IN INCHES
EG. 12.50" LONG = D3650-7-12.50

D3650-9 & D3650-11 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET,
PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) D3650-9 WEIGHT: 0.05 lb
D3650-11 WEIGHT: 0.007 lb

RELEASED
08/10/14

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 9 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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